Redundancy of information processing facilities

ISO 27002 Control 8.14

Control

Information processing facilities should be implemented with redundancy sufficient to meet availability requirements

Purpose

To ensure the continuous operation of information processing facilities





Why is it important?

- Redundancy measures support short recovery times and contribute to resilience
- It prevents interruption due to single component failure
- Ensures the same security level for redundant components as primary ones

Which details are important?

- The implementation of redundancies can introduce risks to integrity or confidentiality which need to be considered
- Redundant components should ensure the same security level as the primary ones
- Procedures should establish if the redundant components are always activated, or activated in case of emergency (automatically or manually)
- Cloud computing offers multiple live versions in separate physical locations with automatic failover





What should be monitored?

- Redundant systems are regularly tested to ensure failover capability
- Alert mechanisms notify the organization of failures
- Redundant components are maintained at the same security level as primary ones

Link with other frameworks

- NIST 800-53 rev5 : CP-2, CP-6, CP-7
- NIST CSF 2.0: GV.OC-04, PR.IR-03

